

Claims

- [c1] 1. A method for distributing media comprising:
receiving at a server a request from a first client for a particular media item, said first client having broadband connectivity to other clients;
at the server, determining a second client who has an encrypted copy of the desired media item;
transferring the encrypted copy of the desired media item from the second client to the first client;
after the encrypted copy has been transferred to the first client, indicating at the first client that the desired media item is now available; and
in response to receiving payment authorization from the first client, decrypting the desired media item for use at the first client.
- [c2] 2. The method of claim 1, wherein said media includes various file types.
- [c3] 3. The method of claim 1, wherein said media includes selected ones of audio and video files.
- [c4] 4. The method of claim 1, further comprising:
pre-loading media items at clients so as to facilitate dis-

tribution of media items.

- [c5] 5. The method of claim 1, wherein the receiving step includes:
displaying a catalog of media items available; and
receiving user input from the first client for selecting one of the media items available from the catalog.
- [c6] 6. The method of claim 5, wherein the catalog comprises an online catalog accessible via a Web browser.
- [c7] 7. The method of claim 5, wherein the catalog comprises an online catalog that may be displayed on a television device connected to a set-top box with broadband connectivity.
- [c8] 8. The method of claim 5, wherein the catalog is downloaded to a set-top box with broadband connectivity for display at a television device connected to the set-top box.
- [c9] 9. The method of claim 1, wherein said broadband connectivity includes peer-to-peer connectivity between clients.
- [c10] 10. The method of claim 9, wherein the peer-to-peer connectivity includes a peer-to-peer network operating on the Internet.

- [c11] 11. The method of claim 1, wherein the first client includes a local device capable of decrypting encrypted media items and displaying them on a television device.
- [c12] 12. The method of claim 11, wherein the local device includes a set-top box having a hard disk for storing the requested media item that is transferred to the first client.
- [c13] 13. The method of claim 12, wherein the requested media item is stored on the hard disk only in encrypted form.
- [c14] 14. The method of claim 1, wherein said transferring step includes transferring the encrypted copy to a storage device connected to a set-top box capable of decrypting encrypted media items and rendering them on a television device at the first client.
- [c15] 15. The method of claim 1, wherein the first client includes a network that allows a set-top box at the first client to share broadband connectivity.
- [c16] 16. The method of claim 1, further comprising: transferring an encrypted copy of the desired media item from a media server, if a copy of the requested media item is not available from other clients.

- [c17] 17. The method of claim 1, further comprising:
allowing the first client to use the requested media item
for a limited period of time, after receipt of the payment
authorization.
- [c18] 18. The method of claim 1, further comprising:
receiving at the server a request from a third client for
the particular media item; and
transferring the encrypted copy of the desired media
item from the first client to the third client.
- [c19] 19. The method of claim 1, wherein the transferring step
includes:
scheduling transfer of the encrypted copy of the desired
media item to occur at a particular time.
- [c20] 20. The method of claim 1, wherein the server includes a
customer management subsystem for tracking and man-
aging customers.
- [c21] 21. The method of claim 1, wherein the server is in com-
munication with at least one repository of digital media,
so that the server may direct transfer of the requested
media item from said at least one repository as needed.
- [c22] 22. The method of claim 21, wherein said at least one
repository comprises a plurality of servers, with each

server storing a subset of the available digital media, such that a subset of the plurality of servers has at least one copy of each media item.

[c23] 23. The method of claim 1, wherein the receiving step includes:

receiving at a server a list establishing the first client's priorities for receiving desired media items.

[c24] 24. The method of claim 23, wherein higher priority items on the list are transferred before any lower priority items.

[c25] 25. The method of claim 1, wherein the transferring step includes:

scheduling transfer of multiple media items to the first client from multiple other clients.

[c26] 26. The method of claim 1, wherein the transferring step includes:

scheduling transfer of portions of a media item to the first client from multiple other clients.

[c27] 27. A computer-readable medium having processor-executable instructions for performing the method of claim 1.

[c28] 28. A downloadable set of processor-executable instruc-

tions for performing the method of claim 1.

- [c29] 29. A distributed media distribution system comprising:
a plurality of clients having peer-to-peer connectivity to one another;
at least one server for processing a request from a first client for a particular media item, for determining a second client who has an encrypted copy of the desired media item at the server, and for arranging transfer of the encrypted copy of the desired media item from the second client to the first client; and
a client rendering device for decrypting the desired media item for use by an authorized user at the first client.
- [c30] 30. The system of claim 29, wherein said media includes various file types.
- [c31] 31. The system of claim 29, wherein said media includes selected ones of audio and video files.
- [c32] 32. The system of claim 29, further comprising a Web server for displaying a catalog of media items available, and for receiving user input from the first client for selecting one of the media items available from the catalog.
- [c33] 33. The system of claim 32, wherein the catalog comprises an online catalog accessible via a Web browser.

- [c34] 34. The system of claim 29, further comprising a catalog that may be displayed on a television device connected to a set-top box with broadband connectivity.
- [c35] 35. The system of claim 34, wherein the catalog is downloaded to the set-top box for display on the television device connected to the set-top box.
- [c36] 36. The system of claim 29, wherein said peer-to-peer connectivity comprises a peer-to-peer network operating on the Internet.
- [c37] 37. The system of claim 36, wherein each client connects to the peer-to-peer network via a broadband connection.
- [c38] 38. The system of claim 29, wherein the client rendering device is capable of decrypting encrypted media items and displaying them on a television device.
- [c39] 39. The system of claim 38, wherein the client rendering device includes a set-top box having a hard disk for storing the requested media item that is transferred to the first client.
- [c40] 40. The system of claim 39, wherein the requested media item is stored on the hard disk only in encrypted form.

- [c41] 41. The system of claim 39, wherein the set top box stores pre-loaded media items so as to facilitate distribution of media items.
- [c42] 42. The system of claim 29, wherein the first client includes a network that shares broadband connectivity with the client rendering device.
- [c43] 43. The system of claim 29, further comprising:
a media server capable of transferring an encrypted copy of the desired media item to clients, if a copy is not already available from other clients.
- [c44] 44. The system of claim 29, wherein the first client is allowed to use the requested media item for a limited period of time.
- [c45] 45. The system of claim 29, wherein in response to the server receiving a request from a third client for the particular media item, the server arranges for transfer of the encrypted copy of the desired media item from the first client to the third client.
- [c46] 46. The system of claim 29, wherein the server arranges for the transfer by scheduling the transfer of the encrypted copy to occur at a particular time.
- [c47] 47. The system of claim 29, wherein the server includes

a customer management subsystem for tracking and managing customers.

- [c48] 48. The system of claim 29, wherein the server is in communication with a repository of digital media, so that the server may direct transfer of the requested media item from the repository as needed.
- [c49] 49. The system of claim 29, wherein the server receives a prioritized list establishing the first client's priority for receiving desired media items.
- [c50] 50. The system of claim 49, wherein the server arranges for transfer of multiple media items to the first client from multiple other clients, pursuant to the prioritized list.
- [c51] 51. The system of claim 49, wherein higher priority items on the prioritized list are transferred before any lower priority items.
- [c52] 52. The system of claim 29, wherein the client rendering device includes an interface for indicating that a given desired media item has completed transfer and is available for use.
- [c53] 53. The system of claim 52, wherein the interface indicates transfer progress for any items that are currently

being transferred.

- [c54] 54. The system of claim 29, further comprising:
a digital media pass that may be purchased online to allow access to the desired media item.
- [c55] 55. The system of claim 54, wherein the digital media pass authorizes issuance to the first client of a decryption key enabling decryption and playback of the desired media item.
- [c56] 56. A method for secure delivery of media content via the Internet, the method comprising:
providing at a server a catalog of media items available in encrypted format from a plurality of devices having broadband connectivity to the Internet;
receiving a priority list from a first device representing a prioritized list of media items requested by the first device from the catalog;
scheduling delivery to the first device of a particular media item on the priority list from at least one second device having an encrypted copy of the particular media item;
transferring an encrypted copy of the particular media item from said at least one second device to the first device; and
in response to a request to purchase the particular media

item transferred to the first device, providing a decryption key to the first device enabling the encrypted copy of the particular media item to be played at the first device.

- [c57] 57. The method of claim 56, wherein said media items include various file types.
- [c58] 58. The method of claim 56, wherein said media items include selected ones of audio and video files.
- [c59] 59. The method of claim 56, wherein said plurality of devices having broadband connectivity includes a plurality of client devices having peer-to-peer connectivity to one another.
- [c60] 60. The method of claim 56, wherein said plurality of devices having broadband connectivity includes at least one server having encrypted copies of media items for supply to client devices.
- [c61] 61. The method of claim 56, further comprising:
pre-loading encrypted copies of media items at said plurality of devices having broadband connectivity.
- [c62] 62. The method of claim 56, wherein said plurality of devices having broadband connectivity includes a client set-top box having broadband connectivity through a

network.

- [c63] 63. The method of claim 62, wherein said catalog is displayed on a television connected to the client set-top box.
- [c64] 64. The method of claim 63, wherein said catalog is downloaded from the server and stored locally on a database at the client set-top box.
- [c65] 65. The method of claim 56, wherein said catalog is a catalog available on the Internet and accessible via a Web browser.
- [c66] 66. The method of claim 56, wherein the first device comprises a client set-top box having a hard disk for storing encrypted media items.
- [c67] 67. The method of claim 66, wherein said set-top box includes a user interface for issuing a request to play an encrypted media item available on the set-top box's hard disk.
- [c68] 68. The method of claim 56, wherein said step of scheduling delivery includes comparing the priority list received from the first device with media items available on the first device, so as to determine the particular media item to be delivered to the first device.

- [c69] 69. The method of claim 56, further comprising:
maintaining a database listing copies of encrypted media
items available on each of said plurality of devices.
- [c70] 70. The method of claim 69, wherein said step of
scheduling delivery includes determining at least one
second device having a copy of said particular media
item based upon consulting the database.
- [c71] 71. The method of claim 56, wherein said step of
scheduling delivery includes determining that the first
device is authorized to receive delivery of the particular
media item.
- [c72] 72. The method of claim 56, wherein said step of
scheduling delivery includes scheduling delivery of por-
tions of the particular media item from a plurality of sec-
ond devices.
- [c73] 73. The method of claim 72, wherein said step of
scheduling delivery includes determining a particular
portion of the particular media item to be sent by each
of said plurality of second devices.
- [c74] 74. The method of claim 56, wherein said step of
scheduling delivery includes determining whether to de-
liver the particular media item from a server repository

or from a peer client having a copy of the particular media item.

- [c75] 75. The method of claim 56, wherein said step of scheduling delivery includes scheduling delivery from a client set-top box having a copy of the particular media item, so as to conserve server resources.
- [c76] 76. The method of claim 56, wherein said step of scheduling delivery includes scheduling a time for delivery of the particular media item to the first device.
- [c77] 77. The method of claim 56, further comprising:
receiving a priority list from a third device requesting said particular media item; and
transferring the encrypted copy of the particular media item from the first device to the third device.
- [c78] 78. The method of claim 56, further comprising:
receiving a priority list from a third device requesting said particular media item; and
transferring a portion of the encrypted copy of the particular media item from the first device and a portion of the encrypted copy of the particular media item from said at least one second device to the third device.
- [c79] 79. The method of claim 56, wherein said step of scheduling delivery includes scheduling delivery based

upon optimizing delivery of media items to a plurality of devices requesting media items.

- [c80] 80. The method of claim 56, wherein said step of transferring an encrypted copy of the particular media item includes transferring portions of the particular media item from a plurality of second devices.
- [c81] 81. The method of claim 56, wherein said step of providing a decryption key includes providing a decryption key valid for a limited period of time.
- [c82] 82. The method of claim 56, wherein said step of providing a decryption key includes:
specifying a viewing period comprising a limited period of time during which the first device may decrypt and playback a media item; and
providing a decryption key to the first device only during the specified viewing period.
- [c83] 83. The method of claim 56, wherein said first device comprises a client set-top box capable of decrypting encrypted media items and rendering them on a connected television device.
- [c84] 84. A computer-readable medium having processor-executable instructions for performing the method of claim 56.

- [c85] 85. A downloadable set of processor-executable instructions for performing the method of claim 56.
- [c86] 86. A distributed media distribution system comprising:
a plurality of clients having peer-to-peer connectivity to one another;
at least one server for processing a request from a first client for a particular media item, for determining a second client who has a protected copy of the desired media item at the server, and for arranging transfer of the protected copy of the desired media item from the second client to the first client; and
a client rendering device for storing a protected copy of the desired media item at the first client and rendering the desired media item to an authorized user at the first client.
- [c87] 87. The system of claim 86, wherein said media includes various file types.
- [c88] 88. The system of claim 86, wherein said media includes selected ones of audio and video files.
- [c89] 89. The system of claim 86, further comprising a Web server for displaying a catalog of media items available, and for receiving user input from the first client for selecting one of the media items available from the cata-

log.

- [c90] 90. The system of claim 86, further comprising a catalog that may be displayed on a television device connected to a set-top box with broadband connectivity.
- [c91] 91. The system of claim 90, wherein the catalog is downloaded to the set-top box for display on the television device connected to the set-top box.
- [c92] 92. The system of claim 86, wherein said peer-to-peer connectivity comprises a peer-to-peer network operating on the Internet.
- [c93] 93. The system of claim 92, wherein each client connects to the peer-to-peer network via a broadband connection.
- [c94] 94. The system of claim 86, wherein the client rendering device is capable of displaying media items on a television device.
- [c95] 95. The system of claim 86, wherein the client rendering device includes a set-top box having a hard disk for storing the protected copy of the requested media item that is transferred to the first client.
- [c96] 96. The system of claim 95, wherein the protected copy of the requested media item is stored on the hard disk in

encrypted form.

- [c97] 97. The system of claim 86, wherein the first client includes a network that shares broadband connectivity with the client rendering device.
- [c98] 98. The system of claim 86, further comprising:
a media server capable of transferring a protected copy of the desired media item to a client, if a protected copy is not available from other clients.
- [c99] 99. The system of claim 86, wherein the first client is allowed to use the requested media item for a limited period of time.
- [c100] 100. The system of claim 86, wherein in response to the server receiving a request from a third client for the particular media item, the server arranges for transfer of a protected copy of the desired media item from the first client to the third client.
- [c101] 101. The system of claim 86, wherein the server arranges for the transfer by scheduling the transfer of the protected copy to occur at a particular time.
- [c102] 102. The system of claim 86, wherein the server includes a customer management subsystem for tracking and managing customers.

- [c103] 103. The system of claim 86, wherein the server is in communication with a repository of digital media, so that the server may direct transfer of the requested media item from the repository as needed.
- [c104] 104. The system of claim 86, wherein the server receives a prioritized list establishing the first client's priority for receiving desired media items.
- [c105] 105. The system of claim 104, wherein the server arranges for transfer of multiple media items to the first client from multiple other clients, pursuant to the prioritized list.
- [c106] 106. The system of claim 104, wherein higher priority items on the prioritized list are transferred before any lower priority items.
- [c107] 107. The system of claim 86, wherein the client rendering device includes an interface for indicating that a given desired media item has completed transfer and is available for use.
- [c108] 108. The system of claim 107, wherein the interface indicates transfer progress for any items that are currently being transferred.
- [c109] 109. The system of claim 86, further comprising:

a digital media pass that may be purchased online to allow access to the protected copy of the desired media item.